

D5000 PC & AS Drip Line



The Next Evolution In Drip Technology

Rivulis D5000 PC & D5000 AS Drip Line

- Pressure compensating for uniform irrigation
- Developed using the latest advancements of drip technology to minimize clogging risk
- Maximum flexibility with 5 x flow rates & multiple wall thickness options
- Anti-siphon feature available for subsurface irrigation

"We have hard water that often causes problems in drip irrigation. However we have found that Rivulis D5000 performs exceptionally well, even with the high mineral & high biomass content in our water."

Gali Tal,
Field Crop Manager Megiddo
Mt'farm, Israel

Evolution: Advancement of PC Drip Technology

Rivulis PC Drip Line represents the most significant advancement of PC drip technology in the past decade. After many years of research, the Rivulis D5000 PC was launched in 2011 and set a new standard in drip line technology.

From engineering designed to provide maximum resistance clogging to precision manufacturing with state of the art quality controls, Rivulis D5000 PC is the drip line to choose if **compromise is not an option.**

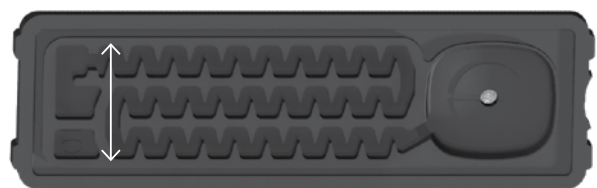
Traditional Emitters



Small inlet filtration area Narrow & short labyrinth Small pool area

Modular-linear layout, reduced filtration area
Increased clogging risk, small outlet area

D5000 Maximized Design



Large labyrinth

Multi-zone inlet filters



Large outlet area

Every component maximized
Outstanding performance & resistance to clogging

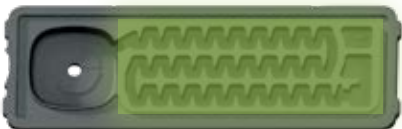


40 independent inlet filters across **3 zones** in every Rivulis D5000 PC emitter



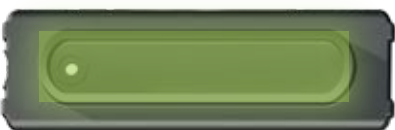
Inlet filters are your first layer of protection against foreign particles. Rivulis D5000 PC features a unique multi-zone inlet area with 40 inlet filters to provide maximum protection to clogging and almost 300% functional filtration area compared to main competitive product in the market.

Extra wide **flow** labyrinth

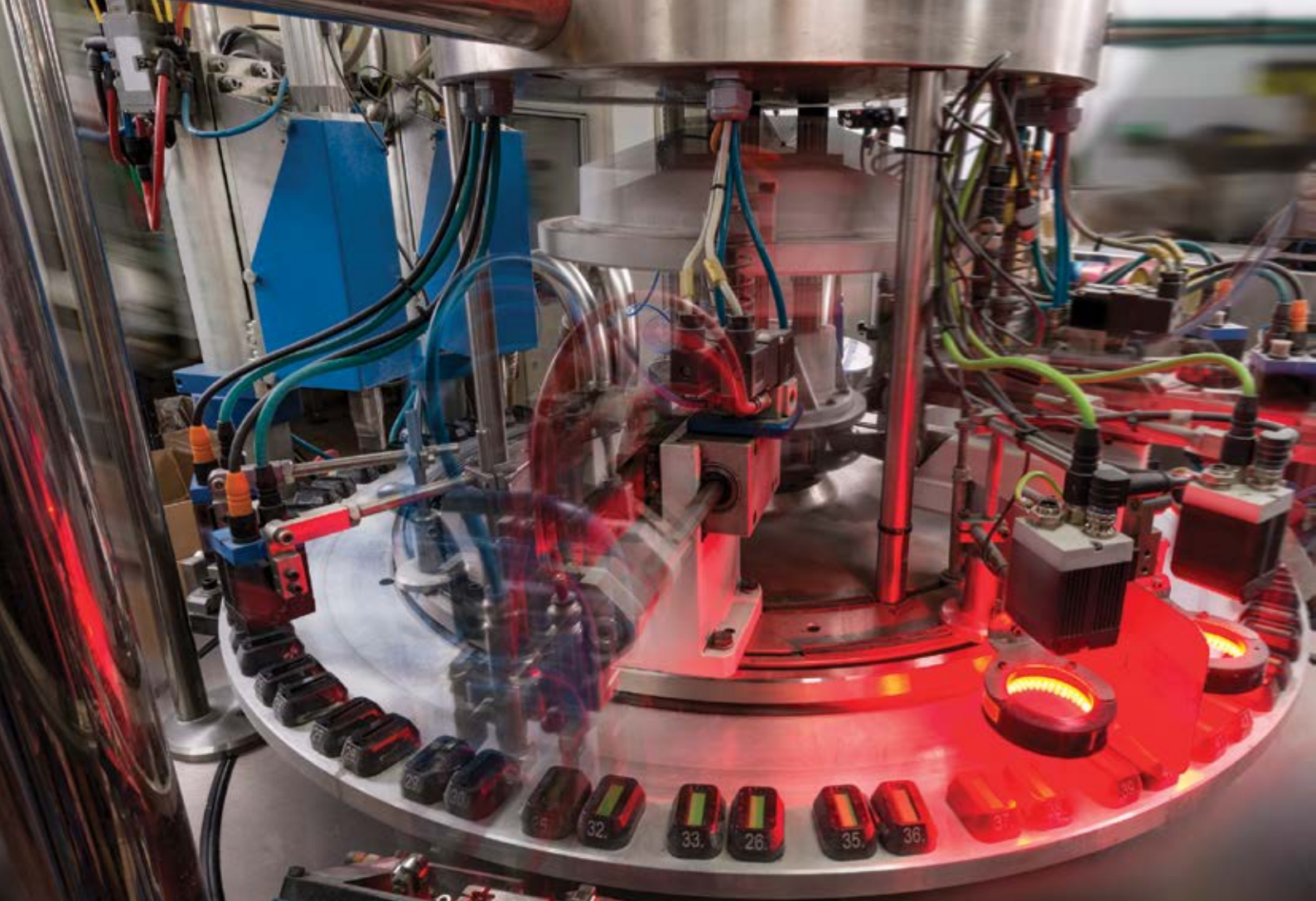


Advanced engineering of the Rivulis D5000 PC labyrinth provides the ultimate balance of incrementally reducing flow while also forming high turbulence in the emitter to help ensure solids stay in suspension. Rivulis D5000 PC features one of the largest flow paths available to help prevent clogging.

Full size outlet pool



Dirt ingestion is a risk for all drip irrigation systems. The unique long outlet pool of the Rivulis D5000 PC in conjunction with the raised wall design provides the maximum distance between the emitter outlet and the tube hole to help prevent dirt suck-back. The full size pool also allows a true slit outlet in 15 mil configurations.



Evolution: Precision Manufacturing & Quality

Automated Assembly



Every emitter manufactured goes through a multi-stage automated testing process to ensure correct assembly

In-Line Monitoring



A photo of every inserted emitter is taken (up to 7 per second) to ensure correct alignment in the drip line during production

Testing

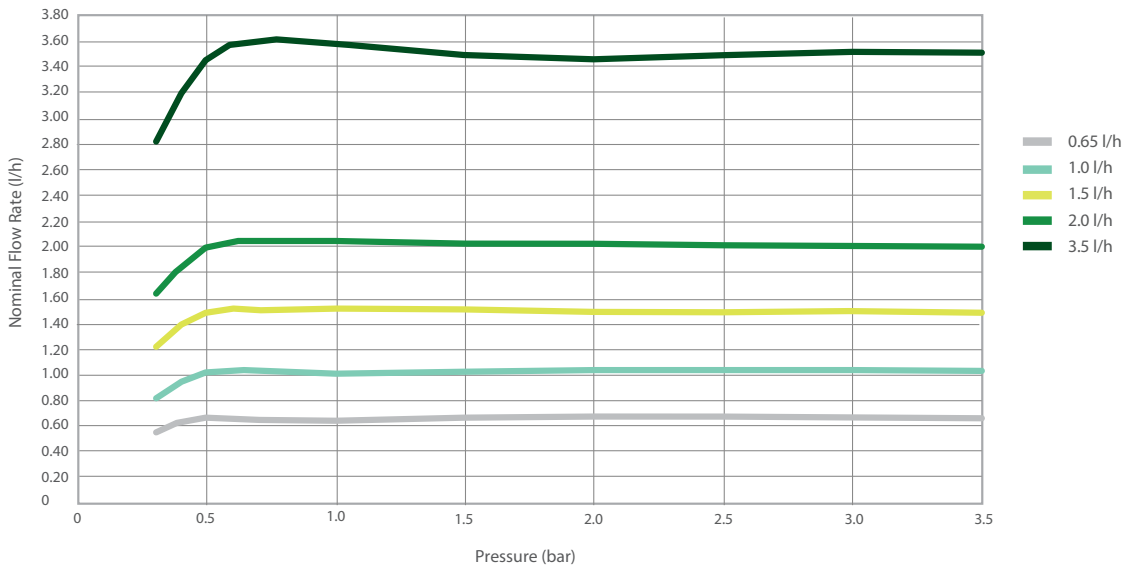


Before dispatch, Rivulis D5000 PC must meet a number of stringent tests including, flow test, tube analysis, weld strength and tensile strength tests

Delivering Outstanding Crop Uniformity

With one of the widest flow regulating ranges available, D5000 PC provides outstanding uniformity even on undulating terrain or long run lengths. This helps ensure that your crop at the end of rows receives the same amount of water as those at the start for more consistent yields.

Rivulis D5000 PC Flow / Pressure



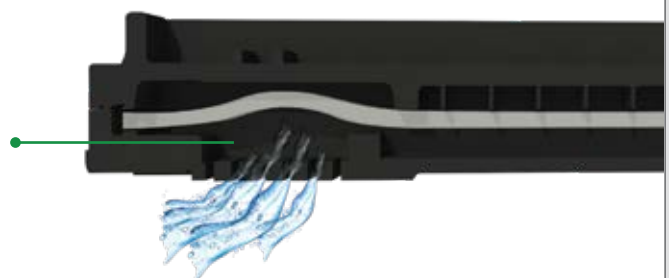
Anti-Siphon: Rivulis D5000 AS Now Available

In conditions where risk of soil ingestion at shut-off is high, Rivulis D5000 AS protects you through anti-siphon diaphragm technology. When there is negative pressure in the hose (i.e. a vacuum caused at system shut-off), the membrane lowers against the inlet filters, which in turn slows the reverse of water. The stronger the vacuum, the stronger the seal that is made.

Rivulis D5000 AS – additional protection to your subsurface irrigation system.

Drip Line With Positive Pressure In Hose

Pressure in hose raises pressure regulating diaphragm, allowing water to enter the Rivulis D5000 emitter through the emitter inlet



Drip Line With Negative Pressure (Vacuum) In Hose

Negative pressure (vacuum) in the hose causes the diaphragm to create a seal against the raised edges of the emitter inlet, preventing suck-back through the emitter



D5000 PC & D5000 AS | Performance Data

Nominal Ø	Wall Thickness		Internal Ø	Outside Ø	Flow Rate	Max. Op. Pressure	Roll Length	Max. Run Length (m) x Spacing Between Emitters (cm)							
	mm	mil						mm	mm	mm	mm	mm	mm	mm	mm
16	15*	0.38	16.1	16.86	0.65	2.2	800**	176	225	315	396	472	541	638	785
	30	0.76	13.8	15.32		2.5	600	133	172	243	308	369	425	503	624
	35	0.89	13.8	15.58		3.0	500	144	186	263	333	399	460	545	676
	40	1.02	13.8	15.83		3.5	400	153	198	280	355	425	490	581	721
	45	1.14	13.8	16.09		3.5	300	153	198	280	355	425	490	581	721
17	18	0.45	15.3	16.2		2.2	1100	162	207	290	364	433	496	585	720
	25	0.64	15.3	16.57		2.5	800	171	219	306	386	459	526	620	763
	35	0.89	15.3	17.08		3.0	450	185	237	331	417	496	569	671	826
	40	1.02	15.3	17.33		3.5	450	197	252	353	445	529	607	717	882
	45	1.14	15.3	17.59		3.5	400	197	252	353	445	529	607	717	882
20	35	0.89	17.6	19.38		3.0	350	250	318	441	551	652	745	875	1072
	40	1.02	17.6	19.63		3.5	350	266	339	470	588	695	795	935	1145
	45	1.14	17.6	19.89		3.5	350	266	339	470	588	695	795	935	1145
	47	1.19	17.6	19.99		3.5	350	266	339	470	588	695	795	935	1145
22	15*	0.38	22.2	22.96		1.8	800	332	415	562	692	810	919	1070	1299
	25	0.64	22.2	23.47		2.5	500	386	483	656	808	946	1073	1250	1519
23	40	1.02	20.8	22.84		3.0	350	362	456	623	770	904	1028	1201	1461
25	15*	0.38	25	25.76		1.4	700	372	462	619	757	882	998	1159	1402
	18	0.45	25.0	25.9		1.7	600	412	512	686	840	979	1108	1286	1557
27	40	1.02	25.0	27.03		2.7	350	499	623	842	1034	1210	1371	1597	1936
16	15*	0.38	16.1	16.86	1.00	2.2	800**	132	169	237	298	356	408	482	594
	30	0.76	13.8	15.32		2.5	600	101	130	184	234	280	322	383	474
	35	0.89	13.8	15.58		3.0	500	109	140	199	252	302	349	414	513
	40	1.02	13.8	15.83		3.5	400	116	149	212	269	322	371	441	547
	45	1.14	13.8	16.09		3.5	300	116	149	212	269	322	371	441	547
17	18	0.45	15.3	16.2		2.2	1100	122	157	219	276	328	377	445	547
	25	0.64	15.3	16.57		2.5	800	128	164	230	290	345	396	467	576
	35	0.89	15.3	17.08		3.0	450	139	179	251	316	376	432	510	628
	40	1.02	15.3	17.33		3.5	450	148	190	267	337	401	461	544	670
	45	1.14	15.3	17.59		3.5	400	148	190	267	337	401	461	544	670
20	35	0.89	17.6	19.38		3.0	350	189	241	334	418	495	566	665	815
	40	1.02	17.6	19.63		3.5	350	201	256	356	446	528	604	710	870
	45	1.14	17.6	19.89		3.5	350	201	256	356	446	528	604	710	870
	47	1.19	17.6	19.99		3.5	350	201	256	356	446	528	604	710	870
22	15*	0.38	22.2	22.96		1.8	800	253	316	428	527	617	700	816	990
	25	0.64	22.2	23.47		2.5	500	290	364	494	609	714	810	944	1147
23	40	1.02	20.8	22.84		3.0	350	273	344	470	582	683	778	908	1106

D5000 PC & D5000 AS | Performance Data

Nominal Ø	Wall Thickness		Internal Ø	Outside Ø	Flow Rate	Max. Op. Pressure	Roll Length	Max. Run Length (m) x Spacing Between Emitters (cm)							
	mil	mm						15	20	30	40	50	60	75	100
mm			mm	mm	l/h	bar	m	m	m	m	m	m	m	m	m
25	15*	0.38	25.0	25.76	1.00	1.4	700	282	350	469	574	670	758	881	1066
	18	0.45	25.0	25.9		1.7	600	312	388	521	637	743	841	977	1183
27	40	1.02	25.0	27.03		2.7	350	376	470	636	782	915	1037	1208	1466
16	15*	0.38	16.1	16.86	1.50	2.2	800**	101	130	183	231	275	316	373	459
	30	0.76	13.8	15.32		2.5	600	77	100	141	179	215	248	294	365
	35	0.89	13.8	15.58		3.0	500	83	107	152	194	232	268	318	395
	40	1.02	13.8	15.83		3.5	400	89	114	163	206	248	286	340	421
	45	1.14	13.8	16.09		3.5	300	89	114	163	206	248	286	340	421
17	18	0.45	15.3	16.2		2.2	1100	94	120	169	212	253	290	342	422
	25	0.64	15.3	16.57		2.5	800	98	126	177	223	266	305	360	444
	35	0.89	15.3	17.08		3.0	450	107	137	193	243	289	332	393	484
	40	1.02	15.3	17.33		3.5	450	114	146	205	259	309	355	419	516
	45	1.14	15.3	17.59		3.5	400	114	146	205	259	309	355	419	516
20	35	0.89	17.6	19.38		3.0	350	145	185	257	322	381	436	512	628
	40	1.02	17.6	19.63		3.5	350	154	197	274	343	406	465	547	671
	45	1.14	17.6	19.89		3.5	350	154	197	274	343	406	465	547	671
	47	1.19	17.6	19.99		3.5	350	154	197	274	343	406	465	547	671
22	15*	0.38	22.2	22.96		1.8	800	194	243	330	406	476	540	629	764
	25	0.64	22.2	23.47	2.5	500	223	280	380	469	550	625	728	886	
23	40	1.02	20.8	22.84	3.0	350	209	264	362	448	527	599	701	853	
25	15*	0.38	25.0	25.76	1.4	700	217	269	362	442	517	584	680	822	
	18	0.45	25.0	25.9	1.7	600	241	300	402	493	575	651	757	917	
27	40	1.02	25.0	27.03	2.7	350	289	361	489	602	705	800	932	1131	
16	15*	0.38	16.1	16.86	2.00	2.2	800**	84	108	152	191	228	262	309	381
	30	0.76	13.8	15.32		2.5	600	64	82	117	149	178	206	245	303
	35	0.89	13.8	15.58		3.0	500	69	89	126	161	193	223	264	328
	40	1.02	13.8	15.83		3.5	400	73	95	135	171	205	237	282	350
	45	1.14	13.8	16.09		3.5	300	73	95	135	171	205	237	282	350
17	18	0.45	15.3	16.2		2.2	1100	77	99	140	176	210	241	284	350
	25	0.64	15.3	16.57		2.5	800	81	104	147	185	221	253	299	368
	35	0.89	15.3	17.08		3.0	450	88	114	160	202	240	276	326	402
	40	1.02	15.3	17.33		3.5	450	94	120	169	213	255	293	346	426
	45	1.14	15.3	17.59		3.5	400	94	120	169	213	255	293	346	426
20	35	0.89	17.6	19.38		3.0	350	120	153	213	267	316	362	426	522
	40	1.02	17.6	19.63		3.5	350	128	163	227	284	337	386	455	558
	45	1.14	17.6	19.89		3.5	350	128	163	227	284	337	386	455	558
	47	1.19	17.6	19.99		3.5	350	128	163	227	284	337	386	455	558

* Not available in AS.

** For 16/15 with emitter spacing less than 20 cm, the roll length is 600 m.

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Nominal Ø	Wall Thickness		Internal Ø	Outside Ø	Flow Rate	Max. Op. Pressure	Roll Length	Max. Run Length (m) x Spacing Between Emitters (cm)								
	mil	mm						15	20	30	40	50	60	75	100	
mm			mm	mm	l/h	bar	m	m	m	m	m	m	m	m	m	
22	15*	0.38	22.2	22.96	2.00	1.8	800	161	202	274	338	396	449	524	636	
	25	0.64	22.2	23.47		2.5	500	185	232	316	390	457	520	606	737	
23	40	1.02	20.8	22.84		3.0	350	174	219	300	372	438	499	582	710	
25	15*	0.38	25.0	25.76		1.4	700	180	224	301	368	430	486	566	684	
	18	0.45	25.0	25.9		1.7	600	200	249	335	410	478	542	630	763	
27	40	1.02	25.0	27.03		2.7	350	240	300	407	500	587	665	776	941	
16	15*	0.38	16.1	16.86		3.50	2.2	800**	58	75	105	133	159	182	215	266
	30	0.76	13.8	15.32			2.5	600	44	57	81	103	123	142	170	210
	35	0.89	13.8	15.58	3.0		500	47	61	87	111	134	154	183	228	
	40	1.02	13.8	15.83	3.5		400	50	65	84	118	149	178	230	276	
	45	1.14	13.8	16.09	3.5		300	50	65	84	118	149	178	230	276	
17	18	0.45	15.3	16.2	2.2		1100	54	69	97	122	146	167	197	244	
	25	0.64	15.3	16.57	2.5		800	57	72	102	129	154	177	209	258	
	35	0.89	15.3	17.08	3.0		450	61	79	111	140	167	191	227	280	
	40	1.02	15.3	17.33	3.5		450	65	84	118	149	178	205	242	298	
	45	1.14	15.3	17.59	3.5		400	65	84	118	149	178	205	242	298	
20	35	0.89	17.6	19.38	3.0		350	83	106	148	185	220	252	296	364	
	40	1.02	17.6	19.63	3.5		350	88	113	158	198	235	269	317	388	
	45	1.14	17.6	19.89	3.5		350	88	113	158	198	235	269	317	388	
	47	1.19	17.6	19.99	3.5		350	88	113	158	198	235	269	317	388	
22	15	0.38	22.2	22.96	1.8		800	111	140	190	234	275	313	365	443	
	25	0.64	22.2	23.47	2.5		500	129	162	221	274	321	365	426	518	
23	40	1.02	20.8	22.84	3.0	350	121	153	210	260	307	349	408	498		
25	15	0.38	25.0	25.76	1.4	700	125	156	210	257	300	340	395	479		
	18	0.45	25.0	25.90	1.7	600	139	173	233	286	334	379	441	534		
27	40	1.02	25.0	27.03	2.7	350	67	210	285	351	411	466	544	661		

* Not available in AS.


** For 16/15 with emitter spacing less than 20 cm, the roll length is 600 m.



Rivulis D5000 PC Flow Regulating Drip Line with Anti-Siphon Option

Drip Line	D5000 PC
Mechanism	Pressure differential from silicon diaphragm with self-cleaning feature
Pressure compensating / Flow regulating	✓
Anti-Siphon	D5000 AS available
Flow Rates (l/h)	0.65, 1.0, 1.5, 2.0, 3.5
Nominal Drip Line Diameter (mm)	16, 17, 20, 22, 23, 25, 27
Drip Line Wall Thickness (mil)	15 (0.38 mm), 18 (0.45 mm) 25 (0.63 mm), 30 (0.76 mm), 35 (0.89 mm), 40 (1.02 mm), 45 (1.14 mm), 47 (1.19 mm)
Outlet	Slit (PC - 15 mil wall thickness), hole (all other configurations)
Operating Pressure Range (bar)	0.5 – 3.5 (according to diameter and wall thickness)



A large, mature tree with a thick trunk and dense green foliage stands in the background of a field. In the foreground, a black irrigation pipe is laid out on the ground, which appears to be a mix of soil and mulch. The scene is brightly lit, suggesting a sunny day.

“The Rivulis D5000 subsurface drip irrigation system stands out for multiple reasons. The system uses far less water, fertilizer and chemicals compared to overhead irrigation. Additionally, the application of fertilizers and chemicals is much easier. It is possible to be precise with both quantity and timing, including daily application if required to maximize efficiency. Traditional irrigation techniques on the other hand are much less precise, and therefore result in wasted fertilizers and chemicals, along with high mechanical costs.”

**Paulo Sérgio Fragnito,
Vista Alegre Farm,
Brazil**

Case study outcomes are for information purposes only and actual results may vary. This literature has been compiled for worldwide circulation and the descriptions, photos, and information are for general purpose use only. Please consult with an irrigation specialist and technical specifications for proper use of Rivulis products. Because some products are not available in all regions, please contact your local dealer for details. Rivulis reserves the right to change specifications and the design of all products without notice. Every effort has been used to ensure that product information, including data sheets, schematics, manuals and brochures are correct. However information should be verified before making any decisions based on this information.